UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,689	04/07/2000	Richard John Blasiak	RAL9000022	2096

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EXAMINER
ZHEN, LI B

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/545,689	BLASIAK ET AL.
		Examiner	Art Unit
		Li B. Zhen	2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 October 2003</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4)☐ Interview Summary (PTO-413) Paper No(s). _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent No. 6,567,837 to Robinson in view of U.S. Patent No. 6,108,715 to Leach.

As to claim 1, Robinson teaches the invention substantially as claimed including

remote procedure calls [communications interface 24 allows the array of active objects

23a-23c to communicate with other object oriented processor arrays, Fig. 2; col. 7, line

65 – col. 8, line 45] in a multiprocessing system, the multiprocessing system including a

general purpose processor [host processor 50, Fig. 8; col. 16, line 60 – col. 17, line 19]

and a plurality of network processors [object oriented processor arrays 10a-10c, Fig. 8];

each of the plurality of network processors having a memory [object oriented processor

array 10...includes a readable memory 12, a writable memory 14, Fig. 1; col. 7, lines 50

– 65], comprising the steps of:

(a) accessing a reserved address in the memory [reserving portions of RAM] of

at least one of the plurality of network processors [reserving portions of RAM 14 for an

active task list table 14b, an active task list name table 14c, Fig. 3; col. 9, lines 22 – 40],

the reserved address comprises a first portion [active task list name table] and a second

portion [active task list table], the second portion comprises a pointer for an instruction

address of a procedure code [actual functionality of the object remains in ROM and is

located by the pointer in the active task list table 14b; col. 10, lines 43 – 67], the

instruction address is not known to the remote procedure call requestor [input message

processor checks the syntax of all incoming messages... examines the command and

looks at the active task list name table to determine the index number for the

instantiated object to which the command is directed, col. 5, lines 43 – 54; Note: the

command is used to identify the index and pointer to the functionality of the object,

therefore, the call requestor does not know the instruction address];

(b) initiating a software action by a first portion of the reserved address [scan

active list table using index number], wherein the software action comprises obtaining

the pointer [to find the pointer to the portion of ROM which contain the layers of the

object] in the second portion of the reserved address [scans at 236 the active task list

table 14b using the index number to find the pointer to the portion of ROM which

contains the layers of the object; col. 11, lines 18 - 60];

(c) accessing and processing the procedure code at the instruction address [the

message is processed at 244 by the functional layer of the object; col. 11, lines 55 – 67]

utilizing the pointer [forwards at 238 the message and the index number to the parser

layer of the object; col. 11, lines 43 – 55].

Although the Robinson reference shows substantial features of the

claimed invention, it does not explicitly show the reserved address being known

to a remote procedure call requestor.

However, Leach teaches remote procedure calls [col. 4, lines 31 – 57], reserved address [virtual function table; col. 11, lines 1 – 48], and the reserved address being known [virtual table pointer is used to identify an address of a virtual table] to a remote procedure call requestor [virtual table pointer is used to identify an address of a virtual table 624 that the kernel uses to invoke the real object's methods; col. 7, lines 35 – 54].

It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of allowing a remote procedure call requestor to know the location of a reserved address as taught by Leach to the invention of Robinson because the virtual table index in conjunction with the resource table's virtual table pointer is used to discern the actual address of the real method and this determined address allows a jump to the real method's address in order to execute the real method [col. 15, lines 45 - 54 of Leach].

As to claim 6, this is a system claim that corresponds to method claim 1; note the rejection to claim 1 above, which also meets this system claim.

As to claims 2 and 7, Robinson teaches the reserved address comprises one instruction [scans at 236 the active task list table 14b using the index number to find the pointer to the portion of ROM which contains the layers of the object; col. 11, lines 18 - 60].

As to claims 3 and 8, Robinson teaches each of the network processors include a reserved address [object oriented processor array includes a system functionality which is automatically instantiated in writable memory at power-up…which maintains an

active task list and other information about instantiated objects; col. 4, lines 26 – 55 and

64 – 67].

As to claims 4 and 9, Robinson as modified teaches location of the reserved

address of each network processor is known by the other processors [virtual table

pointer is used to identify an address of a virtual table 624 that the kernel uses to invoke

the real object's methods; col. 7, lines 35 – 54 of Leach].

As to claims 5 and 10, Robinson teaches the reserved addresses of each

network processor are in the same location of memory [reserves RAM for an active task

list table, an active task list name table, and an active task list data space; col. 4, lines

64 – 67].

Response to Arguments

3.   Applicant's arguments with respect to claims 1 – 10 have been considered but

are moot in view of the new ground(s) of rejection.

Conclusion

4.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

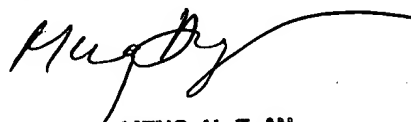than SIX MONTHS from the date of this final action.

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406.

The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for

the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

Li B. Zhen
Examiner
Art Unit 2126

lbz
January 5, 2004

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
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